This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An apparatus for distributed control of an electrical appliance having a plug and a load and two power carrying conductors connecting said plug to said load, comprising:

power control elements that are completely contained within said plug;

interface elements that are connected to said two power carrying conductors and that are not contained within said plug; and

means for transmitting status information from said interface elements to said power control elements by imposition of electrical signals onto said two power carrying conductors, wherein said electrical signals comprise an adjustable duration deadzone at a zero crossing of a sinusoidal excitation.

2. (Original) The apparatus of claim 1 wherein said status information includes items selected from the group consisting of switch state, temperature, light, sound, vibration, and presence of an electrical fault.

3. (Original) The apparatus of claim 1 wherein said power control elements are controlled in response to said status information.

4. (Original) The apparatus of claim 1 wherein said power control elements comprise one or more members selected from the group consisting of thyristors and transistors.

5. (Original) The apparatus of claim 1 wherein said interface elements are resident in a module that is located between said plug and said load.

6. (Original) The apparatus of claim 1 wherein said interface elements are located adjacent to said load.

7. (Original) The apparatus of claim 1 wherein said power control elements can interrupt power to said load.

8. (Original) The apparatus of claim 1 wherein said interface elements comprise one or more of the group consisting of switches, push buttons, potentiometers, and light emitting devices.

9. (Original) The apparatus of claim 1 wherein said load is selected from the group consisting of incandescent lights, electric blankets, heating pads, electric irons, fans, and aquarium heaters.

10. (Original) The apparatus of claim 1 wherein if said status information indicates presence of an electrical fault, power is interrupted by means of said power control elements.

11-16. (Canceled)

17. (Original) An appliance control apparatus that is resident in a module insertable into a receptacle outlet and into which an appliance is plugged, said apparatus comprising means for controlling the appliance and means for transmitting status information to and/or from said appliance by imposition of electrical signals onto two power carrying conductors, wherein said electrical signals comprise an adjustable duration deadzone at a zero crossing of a sinusoidal excitation.

18. (Original) The apparatus of claim 17 wherein power control electronics are resident in said module.

19. (Original) The apparatus of claim 18 wherein said power control electronics are responsive to signals imposed upon the power carrying conductors.

20. (Original) A method for distributed control of an electrical appliance having a plug and a load and two power carrying conductors connecting the plug to the load, the method comprising the steps of:

locating power control elements completely within the plug;

connecting interface elements to the two power carrying conductors, which interface elements are not within the plug; and

transmitting status information from the interface elements to the power control elements by imposition of electrical signals onto the two power carrying conductors, wherein the electrical signals comprise an adjustable duration deadzone at a zero crossing of a sinusoidal excitation.

21. (Original) The method of claim 20 wherein the status information includes items selected from the group consisting of switch state, temperature, light, sound, vibration, and presence of an electrical fault.

22. (Original) The method of claim 20 wherein the power control elements are controlled in response to the status information.

23. (Original) The method of claim 20 wherein the power control elements comprise one or more members selected from the group consisting of thyristors and transistors.

24. (Original) The method of claim 20 wherein the interface elements are resident in a module that is located between the plug and the load.

25. (Original) The method of claim 20 wherein the interface elements are located adjacent to the load.

26. (Original) The method of claim 20 wherein the power control elements can interrupt power to the load.

27. (Original) The method of claim 20 wherein the interface elements comprise one or more of the group consisting of switches, push buttons, potentiometers, and light emitting devices.

28. (Original) The method of claim 20 wherein the load is selected from the group consisting of incandescent lights, electric blankets, heating pads, electric irons, fans, and aquarium heaters.

29. (Original) The method of claim 20 wherein if the status information indicates presence of an electrical fault, power is interrupted by means of the power control elements.

30-35. (Canceled)

36. (Original) An appliance control method employing a module insertable into a receptacle outlet and into which an appliance is plugged, the method comprising the steps of controlling the appliance and transmitting status information to and/or from the appliance by imposition of electrical signals onto two power carrying conductors, wherein the electrical signals comprise an adjustable duration deadzone at a zero crossing of a sinusoidal excitation.

37. (Original) The method of claim 36 wherein power control electronics are resident in the module.

38. (Original) The method of claim 37 wherein the power control electronics are responsive to signals imposed upon the power carrying conductors.